AN ASSESSMENT OF NUTRITIONAL PROFILE AND ROLE OF SMART FOOD IN DIETARY MANAGEMENT OF RURAL WOMEN IN JAIPUR DISTRICT OF RAJASTHAN

A Synopsis

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1. INTRODUCTION:

Nutrition can be expressed as the quantity and quality of food that the body receives. Food is broken down by the body to get the molecules that are actually needed. Nutrients required by the body are protein, fats, carbohydrates, vitamins, and minerals. Sum of all the processes involved by which organisms obtain nutrients, metabolize them, and use them to support the life's processes can be referred as nutrition (Khan et al., 2018). In the entire life span of the human life, nutrition acts as the basic foundation of health and development. Since the initial stage of fetal development, at birth, during infancy, childhood, adolescence, adulthood and to old age, right food and good nutrition is needed for proper growth, development, performance, survival and healthy wellbeing (Popkin et al., 2012). Nutrition is one of the most basic needs of every living individual on the earth as it provides energy to the body for performing various tasks in everyday life.

For living a healthy and active lifestyle we need a variety of nutrients that we get from the food we consume. Hence the food that we eat and nutrition that we get from it plays a vital role in preventing us from diseases and maintaining good health (Choudhry et al., 2019). If diet consumed is not nutritious it may lead to poor health and weaker immunity as a result frequent exposure of illness and delayed recovery is commonly observed. That means more or less of any nutrient can affect the various body mechanisms and alter the normal functioning of the body (Khan et al., 2018).

Nutrition is the one of the fundamental requirement of any organism for maintaining good health and physical integrity. In spite of the fact that women makes a overwhelming majority population, perform important and multiple roles in their families that ranges from taking care of family as mother, caretaker, supporting the household expenditures by earning wages, preparing food, fulfilling nutritional needs, participating in agriculture, storage and distribution they are the one commonly affected by malnutrition and are prone to morbidity and mortality due to lack of proper nutrition (Sujatha, 2017).

A healthy and nutritious diet is necessary not only for survival, but also for the sustainable development of the rural masses**.** According to science right nutrition plays an important role in preventing from many commonly found chronic diseases. Therefore, food and nutritional awareness among women is very important as this just not only influence their nutrition but of the entire family. The knowledge and the health of the women have direct linkage to the health status of the family and the new born. Inadequate nutrition during pregnancy can even lead to lifelong ailment, any deficiency disease or malnutrition among children (Kumari et al., 2021).
A continuous food supply that is our most basic need is in constant threat of climate, animals, diseases, weeds and various other factors (Tremblay 2020). In addition to natural factors choice while selecting food also impact quality and nutrition. To overcome the issue a more integrated approach is addressed. Preferring "traditional" food as the staple is the concept of "Smart Food". These foods can be defined as the one which offers benefits to you (promote health and growth), planet (nature and environment) and the farmer (health and economy) (Diama et al., 2020). Millets and sorghum were selected as the first smart foods with an aim to bring them back as staple and to bring a positive effect over the lives of people, environment and rural livelihood (Smart Food 2019).

Pearl Millet (*Pennisetum glaucum*), common name for which is *Bajra*, a common cereal crop mostly found in semi-arid areas. It can be produced in areas with less rainfall, high temperature, low soil fertility and hence can be grown were other crops might not. Among other cereal and millets it is most drought resistant (Nambiar et al., 2011). Pearl Millet has been documented to contain important nutrients like carbohydrates (56-65%), protein (11.8%), fats (6.4%), high phenolic content (1478 μg/g) and minerals such as iron, copper, zinc, potassium, sodium, magnesium and phosphorous. Additional to this they even contain optimum quantity of resistant starch (2.8-5.1%) and dietary fibre (11.9-13.3%), hence this crop can be utilized as a staple meal and can meet most of nutritional needs (Tomar et al., 2021).

Women are the integral part of any society and any efforts made in order to enhance their nutritional and dietary practices would result in the buildup of their as well as the society nutrition. Having knowledge regarding selecting such foods that would help in building the

nutritional status and health is essential. Hence the present study is being undertaken with the following objectives.

2. Objectives:

- To assess nutritional profile of rural women and awareness level of smart food
- To analyze the dietary pattern and eating behaviours of the rural women
- To identify the prevalent nutritional barriers among rural women
- To counsel women towards dietary role of smart food in dietary management

3. REVIEW OF LITERATURE

(Islam et al., 2020) assessed the nutritional knowledge and health status of total seventy rural and urban women based on ten selected characteristics. Among the ten selected characteristics eight of them namely year of schooling, household size, BMI, household farm size, annual family income, husband's education, awareness on household level nutritional information have major contribution on women's nutritional knowledge.

(Sangeetha et al., 2017) studied the dietary habits, diversity in dietary patters and nutritional status of rural people. Data was collected from Bagpat district of Uttar Pradesh; it was found that 10% men, 20% women, 30% boys, 35% girls fell in underweight category and remaining were overweight. Women were more nutritionally aware as compared to men and yet all the categories were consuming 50% less food then the RDA from every food group. It was even seen that dietary diversity score of women was lesser then the man. The study suggested that promoting diversified cropping pattern can be a right choice to enhance nutritional security in rural areas.

(Sheema et al., 2016) conducted the study on rural women in Bangladesh to understand their food habit and dietary nutritional status. In total 384 respondents were interviewed for the study and it was found that 64% women were consuming fruits regularly, 80% were consuming chicken and meat every week and not even 2% of women were consuming milk on daily basis. Rice was found to be the staple food of the region. And as for the health status half of the population had a good BMI.

(Raghav et al., 2014) studied the nutritional profile of adults in Jharna of Jaipur district of Rajasthan. Information's regarding their anthropometric measurements, occupations, nutritional intake of salt and sugar, different food groups and fast food consumptions were collected through structured questionnaire. It was observed that most of the people most of the population was consuming high salt and nearly half of the population was not consuming fruits. Even more than half of the population was using ground nut oil and ghee and most of them were in habit of consuming tea in morning empty stomach.

(Rao et al., 2010) utilised the data of 1998-99 and 2005-06 from National Nutrition Monitoring Bureau of tribal and rural population to study their nutritional status. Study revealed about the inadequate nutritional status of the women, especially hidden hunger (micro nutrient deficiency) during the period of pregnancy and lactation. It even showed that rural women had high prevalence of goiter and higher vulnerability to under nutrition when compared to urban women.

(Srivastava and Jain 2009) assessed the nutritional awareness in urban slum women of Jodhpur. Sixty samples from three slums were taken and their pre training and post training results of nutritional awareness were recorded. It was found that there was great improvement in food handling and cooking techniques after the provided training,

4. METHODOLOGY

The present study will be conducted under the following steps. These are:

4.1. Sample selection

Rural women above 21 yrs of age from 10 university adopted villages of Jaipur, Rajasthan would be selected.

From each village 100 samples would be collected (n = 1000).

4.2. Collection of data

Primary data would be collected through questioner method to answer following hypothesis

1. It is assumed that the nutritional status of rural women won't be both quantitatively and qualitatively adequate.
2. It is assumed that their knowledge regarding nutritional and health benefits of smart food might not be adequate.

4.3. Counseling

Rural women will be counseled for Dietary Management through Smart Food concept. In total 20 counseling session (2 for each village) would be done for dietary management.

4.4. Data analysis

Collected data would be analyzed using SPSS software.

4.5. Hypothesis testing

Based on the collected data hypothesis would be tested.

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